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CONTENTS

Concerning Mead's The Philosophy of the Act: ARTHUR E. MURPHY 85

Comments and Criticisms 103

PERCY HUGHES—A. USHENKO

Book Reviews 107

WOLFGANG KÖHLER, *The Place of Value in a World of Facts.*

PHILIPP FRANK, *Interpretations and Misinterpretations of Modern Physics.*

GERHARD GENTZEN, *Die gegenwärtige Lage in der mathematischen Grundlagenforschung.*

PIUS SERVIEN, *Le lengage des sciences.*

P. G. FESSARD, *La méthode de réflexion chez Maine de Biran.*

Other New Books and Journals 110

Notes and News 112

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THE JOURNAL OF PHILOSOPHY

CONCERNING MEAD'S *THE PHILOSOPHY OF THE ACT*

I

WITH the appearance of this important volume[1] one major phase in the task of making Mead's philosophic doctrines accessible to a wider public than that of his own colleagues and pupils is completed. The editors tell us that "except for a large body of student notes, which contain much of interest on Mr. Mead's interpretation of the history of ideas, the present material exhausts all the known literary remains deemed worthy of publication" (pp. v, vi). "Practically all the material from Mr. Mead's own hand was used" and this, consisting in considerable part of alternative statements of a theory which Mead himself never brought to a final formulation, includes much that is repetitive and much that, as it stands, was probably not intended for publication. For students of this original philosophy there is none of this material which will not prove enlightening, and the more difficult and fragmentary passages are frequently the most illuminating. The editors were doubtless well advised, therefore, in presenting so inclusive a selection and, with its presentation, the philosophic inquirer outside the Chicago School and its immediate circle of influence has available the full substance of a theory for which great claims have recently been made and from which, as many of us believe, there is much of primary philosophical importance to be learned.

The theory thus presented remains, however, extraordinarily difficult to understand. This is not due merely or even mainly to the incomplete and fragmentary character of the material. The editors have provided a very full and faithful Introduction, in which the various strands in Mead's doctrine are brought together within the outlines of an "empirical-pragmatic-naturalistic cosmology" (p. lxxiii) which is both comprehensive and systematically articulated. Yet the Introduction is philosophically at

[1] *The Philosophy of the Act*, by George Herbert Mead. Edited, with Introduction, by Charles W. Morris, John M. Brewster, Albert M. Dunham, and David L. Miller. Chicago: The University of Chicago Press. 1938. lxxxiv + 696 pp. $5.00. All page references are to this volume.

least as puzzling as is the text. The difficulty appears rather to arise from an essential ambiguity in this theory itself, which invites and at times even requires us to interpret it in a way consistent neither with its primary intent nor with the facts to which it appeals for confirmation. Many of its most important tenets must be taken in one sense if the philosophical claims of the doctrine are to be made good, and in a quite different sense if they are to have any genuine empirical basis or accurately to describe the processes which they purport initially to be about. The result is that even the reader who is wholly sympathetic with Mead's aim to describe mental behavior as an emergent phase of natural process and "so to state the universe that what we call our conscious life can be recognized as a phase of its creative advance" (p. 515), and who is most anxious to understand his description of the "biosocial" environment within which such mental behavior occurs, is likely to find himself confused and ultimately baffled. He will encounter, for instance, an account of the "emergence" of objects "within the Act" which seems at once to reduce the history of physical objects to that of our ideas of or theories about them and at the same time to assume that these theories can retain their ordinary sense as an account of events and processes which antedate and extend beyond the situation in which theories and hypotheses arise and are reconstructed. He will find statements to the effect that "the interior of the scientific physical object" is or is experienced as "the spatially bounded content of effort in the organism" (p. 438) and be compelled to wonder whether this description is speculative psychology, an analysis of the meaning of scientific statements, or, as the Introduction puts it, an account of "the process by which the enduring thing, the categories and the cosmos implicated by science arise within the act" (p. x). And when this last interpretation is offered as the philosophic dividend of the whole inquiry, he may well be inclined to suspect that "the act" referred to is as dubious a pretender to philosophical ultimacy as its traditional metaphysical rivals, and that the attempt to describe all aspects of the experienced world in terms literally adequate only to some fairly elementary types of biological and social adjustment will have its fruits, as have similar reductive experiments in the past, chiefly in an esoteric language, a systematic confusion in contextual reference, and an interminable controversy with alternative and equally inadequate "isms."

If this should be the result it would be a genuine misfortune. For Mead's philosophy is far more than this, and it provides, in at least some of its implications, the basis for a contextual analysis by means of which confusions of this unhappy type can be eliminated.

But it does have this aspect as well, and so long as this is made central, as it is in the present volume both by Mead himself and by his editors, the original and constructive elements in this theory will be far less useful and enlightening than they ought to be, and an important contribution to our knowledge of the mind and its working will be confused with a puzzling speculative reduction of the meaning of statements about physical objects to their function within the empirically insufficient context of "the act."

It is my purpose in the following discussion to show that the confusion I have indicated is present throughout *The Philosophy of the Act,* that it is due to the illicit substitution of "the act" as a pretender to philosophic ultimacy, providing *the* context in which all statements about perceptual and physical objects have their final meaning, for the several specific contexts in which such statements do in fact have their meaning in use, and that its elimination would render more accessible and secure the very considerable contributions that Mead has made to our knowledge of mental behavior. For this purpose it will be necessary to stress the difficulties of the theory and to leave unemphasized many valuable insights included in it. These latter, however, are very fully expounded in the Introduction. That Mead's philosophy offers a pioneer charting of a region of great importance and that we all have much to learn from it is now, I believe, fairly generally agreed. It is, however, a chart that requires critical examination and revision. And it is not a service to the philosophic exploration it is intended to direct to ignore its inadequacies or to treat a blur in its outline as a sign of buried treasure.

II

What, then, is "the philosophy of the act"? Of one of its primary aims there can be but little question. Mental behavior is to be understood as a phase of the creative advance of nature. The meanings appropriate to reflective thought, to scientific description, and to philosophical inquiry develop within the situation in which a bio-social organism adjusts itself to its environment, and are to be interpreted in terms of their rôle in such adaptive behavior. "The act" is in the first place this process of adjustment, and the *philosophy* of the act is an exhibition of reference to such process as both necessary and sufficient for an adequate interpretation of "mind" and its characteristic activities, of the objects, perceptual and physical, with which it purports to deal, and of the meaning and value of its ideas.

But if mental behavior is to be referred to "nature," its distinctive environment, so Mead argues, must go with it. And an

adequate account of this environment must recognize its essentially "perspective" character. "Things are what they are in the relationship between the individual and his environment, and this relationship is that of conduct" (p. 218). An object has the distinctive status of "food" only in relation to the wants and digestive capacities of an organism. Similarly the distance qualities of perceived objects are really "there" as directing organic response though they are not normally included in a statement of the "reality" of the physical object. "These characters have actually emerged in the objects and not simply in the individuals, and our statement must include them as actually belonging to the object in the perspective of the individual where they exist" (p. 225). Hence the "objective reality" of perspectives is a necessary correlate of "social behaviorism" as a theory of mind. For mental behavior can only be interpreted as activity in a natural world if the special environment or perspective determined by its adaptive relations is accepted as a part of nature.

There is, however, a rival account of nature and mind which would exclude this interpretation and, in consequence, read mind out of the natural world. This theory has its basis in the mechanical conception of the world fostered and encouraged by "Renaissance science," and is the parent of those dualisms and idealisms which Mead believes have rendered an adequate theory of mind impossible. The root of the trouble "lies in an implication—that this scientific analysis reveals the reality of nature, not only as it was but as it remains in experience, to the exclusion from the same field of reality of all from which this mechanical statement abstracts" (p. 439). Nor is this implication easy to avoid. "It is evident that as long as we assume the existence of a world of given physical particles in motion with given masses, velocities, accelerations, and directions in a fixed space and time, this world will always constitute a noumenal reality of which experience with its objects (including living forms and their environments) will be but appearances, for we shall always refer experience with its novelties to this physical world as providing its structure and necessary conditions" (p. 422).

If, however, the world of experience, with its perspective characters, is extruded from nature it can only be located in a "mind," now thought of not in terms of social behavior but as the locus of "subjectivity" in this wider and more dubious sense. And from such a non-natural mind to the self as an emergent in social interaction there is no intelligible transition. Hence, if Mead's theory of mind is to stand, some alternative account of the status and "reality" of physical objects must be given which finds a place for

the validity of perceptual and scientific knowledge but does not involve any such "bifurcation" of nature as that here objected to.

It is at this point that the specific problem and method of *The Philosophy of the Act* emerge. The material contained in this volume is not primarily concerned with the nature of mental behavior on the specifically social level, as was *Mind, Self, and Society.*[2] Nor does it develop, though it does foreshadow, the ambitious speculations about the "sociality" of evolution presented in *The Philosophy of the Present.*[3] Its chief concern is with the status of perceptual and physical objects, as these "emerge" with the anticipatory response of an organism to hypothetical consequences of alternative ways of acting, in the "reconstruction" of accepted theories about the perceptual and physical world in order to remove conflicts and difficulties that block on-going activity and, at considerable length, in that organization of alternative time-systems which Mead takes to be the philosophical meaning of Einstein's theory of relativity. The discussion of each of these issues is ingenious and endlessly painstaking. But the reader who treats these analyses primarily as accounts of the specific subjects with which they purport to deal will miss their philosophical import in Mead's theory. The objects described are brought "within the act" not merely in order to clarify the contextual reference of statements which concern them, but in order to show that they have a derivative and instrumental status relative to the completion of delayed responses, and are hence not prior or independent "realities" which are entitled to set up in their own right and to exclude organic process and its correlative environment from the natural world. If such objects, philosophically considered, arise "within the act," indeed within the very perspective adjustments previously relegated to mind, then no philosophical rival to these perspective situations for the status of "reality" remains and Mead can claim, with epistemological and cosmological justification:

> The reflective experience, the world, and the things within it exist in the form of situations. These situations are fundamentally characterized by the relation of an organic individual to his environment or world. The world, things, and the individual are what they are in this relation. . . . The peculiarities of the different situations are not those of appearances or phenomena which inadequately reflect an absolute reality. These situations are the reality. [P. 215.]

Viewed in the light of its philosophical antecedents and rivals, this theory is comprehensible enough. Its aim is "to present an unfractured universe, qualitied as well as quantitied, together with all its meanings, and overcome the bifurcation of nature which arose

[2] Chicago: The University of Chicago Press. 1934.
[3] Chicago: Open Court Publishing Co., 1932.

from scientific measurement and philosophic dogma" (p. 516). It is assumed that so long as statements concerning perceptual and scientific objects appear to have a reference beyond the context in which they are used to reconstruct a problematic situation for the sake of "on-going activity" and future consummatory satisfaction, such bifurcation will be inevitable. But "If one regards knowledge as the process of establishing a hypothetical field of conduct in the presence of the conflicts of alternative terminations of acts which are already initiated, thinking is simply the indication of a possible plan of conduct, an extension of the manipulatory area, by placing the content of resistance into the distance characters and thus making them into hypothetical things. The meanings of things are their relationships within this present insofar as these can be indicated" (p. 539). In such a theory "bifurcation" is simply avoided by identifying the context of meaning with that in which no such ulterior reference arises, and that, in its fullest sense, is the philosophical significance of the philosophy of the act. It leaves as "the reality" the sort of situation which Mead regards as of primary philosophic importance, and it reduces to a phase of this reality the "transcendent" objects that appeared to dispute its claim.

Novel as the resulting system is in its content and particular analyses, the philosophical pattern it follows is a very familiar one. A rising philosophy discerns some specific sort of situation which it holds to be indispensable to an adequate view of the world. In this case it is the adaptive "perspective" relation of organism and environment which is thus, and rightly, held to be essential. The new philosophy finds the field of "reality" preëmpted by a rival claimant which would reduce this basic "situation" to a mere appearance. But how better or more effectively remove this rival than by showing the perspective situation itself to be "the reality" and developing within this situation all the meanings and references which were alleged to transcend it? It is instructive to see how naturally the Introduction falls into this "ism" pattern. If we are not to have a philosophy of mechanism, or of idealism as its compensatory outcome, then surely we must have "within the sociobiological framework of pragmatic thought" (p. xi) a place for all major philosophic interests and be able to say that "in the last analysis the entire world of scientific objects is an elaborate instrumentation functioning in the service of social values" (p. lxvii).

A theory of this sort is bound to operate on two rather different levels. As one "ism" among others it shares their common assumption that there must be some primary context to which, "in the last analysis," all meaningful statements must refer. If "the

world of scientific objects" were given such a status it would constitute a noumenal reality, a non-natural mind would then be presupposed as the locus for perspective characters excluded from it, and we should not be able to understand reflective thought in its essential and constructive function in human behavior. To this view the philosophy of the act offers an attractive alternative. It is empirical, for it refers statements about scientific objects to a context within experience; it is naturalistic, for it treats reflective thought as an emergent from "bio-social" behavior, and it is able to accomplish these results because, as a pragmatic or instrumentalist theory, it claims to test the validity of ideas by their meaning and use in the activities in which thought justifies itself in operation. Such an account is liberal and constructive in intent. It fits the temper of science and allows the philosopher to use, for his own purposes, the language of biology and social psychology in a very up-to-date and frequently enlightening way. As compared with its rivals, it has much to recommend it.

But there is a different level of philosophical inquiry than this, and a more important one. It is that in which a theory is used to clarify the empirical situations to which it claims "ultimately" to refer. It is to Mead's abiding credit that he was not content, as his disciples have sometimes been, to celebrate the merits of the "isms" in question, but sought also, and primarily, to exhibit its contextual application. Unhappily, however, the very characteristics which, on the controversial level, seem so persuasive, operate here to confuse and frustrate the analysis. The "act" is an impressive philosophical pretender, but it is an extremely unsatisfactory contextual referent. The fact appears to be that there *is* no "basic" activity in terms of which all meaning can be defined, and the attempt to construct one is a source not of philosophical enlightenment but of analytic confusion. Its controversial motivation is wholly understandable, but its results are not. There are many activities in which a reflective thinker is engaged and what he means by his statements is, of course, to be understood by the way in which he uses them and the kind of validation which, in practice, he claims for them. To discriminate such meanings and refer each to its appropriate context is a work of considerable merit. But it can only be empirically fruitful if the context of reference is that in which the statements do in fact function in their primary and non-philosophical use, *not* one constructed *ad hoc* to eliminate references which, on metaphysical or epistemological grounds, have been found objectionable, and to justify the claims of something or other to be of social significance or objective "reality."

There is no doubt that Mead intended his account to be em-

pirically applicable, and for his insistence on the need of reference to specific situations we can hardly be grateful enough. But it is none the less true that he combined with this intention a philosophical commitment that tended to defeat its purpose. "The act," as required to justify the claims of "instrumentalism," is simply not the activity, nor any one among the activities, in terms of which the rôle of "ideas" in perception and scientific inquiry can be understood. And the difficulty that arises from its illicit substitution for such activities is a systematic inability to deal with these situations on their own terms. This may seem to be a paradoxical charge to bring against this philosophy, but it is one which the evidence, I believe, will substantiate. And an emphasis upon it may serve to center attention on those features of the theory which require an empirical examination which they have so far simply not received. The primary objection to be made against *The Philosophy of the Act*, is not that it robs us of belief in a "transcendent" reality, or brings philosophy down from its "ivory tower" into the world of "life," but that it so confuses the reference of empirical statements that we are never able to keep our eyes on the objects we are supposed to be describing. "By their fruits ye shall know them," and for all its admirable intentions one of the principal products of this philosophy is intellectual confusion, systematically perpetuated for the sake of a theory of knowledge devised to avoid a reference to objects with which, on metaphysical grounds, the author is unwilling to deal.

The consequence of such a confusion of reference ought, if this hypothesis is correct, to show itself in the following way. One aim of the theory is to specify the status of "objects" as they are referred to in perception, or physical theory, or historical inquiry. In each of these fields Mead has an excellent knowledge of the subject and much that is valuable to say. But in no case can he take statements about such objects on their own terms, for that would involve a reference beyond the "situation" in which, in his philosophical theory, all meaning is "finally" to be found. Hence we shall constantly find that he is not talking about such statements in their own proper usage but is reducing them to, or deriving them from, another to which they are contextually inappropriate. This reduction must be made if the philosophy is to work, and it can not be made if the analysis is to apply literally and meaningfully to the situations it purports to describe. Hence the statements in question must *both* retain their ordinary sense *and also* be used in a way with which that ordinary sense is incompatible. It will not be surprising if such a philosophy, even in the hands of as outstanding a thinker as Mead, remains frustrated, esoteric, and in-

complete. That the difficulties of *The Philosophy of the Act* arise in this fashion has now to be shown.

III

The relativity of objects, as objects of inquiry, to their place within the activity of research, has long been one of Mead's primary themes. He returns to it in the present volume. The world within which scientific investigation proceeds is a world that is "there" not as infallibly known but simply as the assured basis for action. Objects of inquiry belong to the world that is "there" so long as they are assumed to be actual, and so long as this assumption does not give rise to difficulties. When problems arise, however, within this world, the task of research is to reconstruct it in such fashion that activity may continue to a satisfactory consummation. In this reconstruction objects may lose their objective status and lapse into subjectivity. They are then accounted mere ideas which have failed to justify themselves. But as long as they were accepted as genuine, so long they were genuine objects in the world within which inquiry occurs, though they were "there," of course, only in relation to the activity which treated them as there (cf. 71 ff.).

Now there is a sense in which a description of this sort can be true and enlightening. A change in men's ideas about the world is a change in an objective situation, namely, the situation in which they respond to their environment in terms of what they take it to be. An account of such changes can be an important contribution to the history of ideas. But it can not, without serious confusion, be taken as indicating the context in which our references to the objects of inquiry have their ultimate meaning. For there is presupposed in such inquiry a reference to objects as "there" or not "there" in a physical medium, and as having in this medium a history which is not merely that of what they are *taken to be* for the purpose of on-going activity, but of what in their own nature and physical relations they are. A man may "emerge" as the murderer wanted by the police only several days after the crime has been committed. He becomes "the guilty man," so far as the investigation is concerned only at that time, and his status is notably and objectively changed by this fact. But the whole warrant for his identification is that he was in fact the murderer before he was so identified, and was there when the crime was committed when he was not yet "there" as an object of suspicion.

The paradoxical feature of Mead's contribution to the history of ideas is that in it the derivative status which an object acquires through social acknowledgment defines its primary meaning. Only

thus can the objectionable reference to the past as it was, and not as it will come to have been when history is satisfactorily rewritten, be eliminated. Only thus, in other words, can the objects of historical inquiry be reduced to a metaphysically innocuous status within the act of bio-social adjustment. But an historical inquiry whose primary object is simply its own on-going process is not the inquiry that historians are engaged in when they try to find out what actually happened in the past. To treat it as though it were is to rob it of its primary reference and justification. The transformation that ensues is controversially required if the philosophy of the act is to maintain itself. It is not, however, an adequate basis for the contextual analysis of the meaning of historical statements. And when it is taken as such, the result is a confusion of the sort already described.

In the present volume, however, "the act" is not, for the most part, that of historical research, but the more elementary bio-social adjustment which occurs when the organism by attributing an "inside" to distant stimuli is able to bring the future of its own possible action into the range of its present response. Mead's theory here is in the first place an account of the manner in which an organism comes to treat stimuli not merely as incitements to action but as characters of objects which now possess the "reality" they would be found to have if one were in contact with them, and whose "future" can now be used to organize anticipatory responses for on-going activity. It is made abundantly plain that the object, thus described, has its meaning within an activity which begins with the perception of distance characters and has its end in a satisfying consummatory experience. "By placing the perception of physical things within the act, we find that such perception is not the final character in experience. This is commonly termed 'consummation'" (p. 136). The object thus considered is simply an organization of present responses for the sake of future satisfaction, and is essentially instrumental to such satisfaction. It is a "collapsed act."

Viewed in this light the following statements about physical objects and their status are intelligible. "The physical thing, then, as distinct from a stimulus, is a hypothetical, hence future, accomplishment of an initiated process, to be tested by the contact experience" (p. 25). "The act, then, is antecedent to the appearance of things and of the organism as objects" (p. 147). And especially, "the physical object has an interior in the same sense that the social object, or the other, has an interior. It is one which is provided by the organism tending to act toward itself as the physical or social object acts toward the organism. Indeed the physical

object is but an abstraction from the social object. It is this inner content of the physical object which constitutes its matter, its effective occupation of space" (p. 430).

But, in the second place, Mead intends to use "the object" *thus identified* as the ultimate referent for perceptual and scientific statements. It is *this* content which is isolated first in ordinary perception and later in "Renaissance science" as the "reality" of the physical thing, and when relativity physics shows that imputed contact values vary with the motion or rest of the measured object, it rescues the "reality" of the object from this suppositious independence and brings it back within the "perspectives" which, in their present organization for the sake of future action, really constitute "the reality." When a physicist, therefore, talks about the relative motion of measured objects, it is this imputed content of effort or resistance to which he is "ultimately" referring, and the equations he uses express the sociality in terms of which one can pass from one "perspective" to another by "taking the rôle of the other," and in this fashion so represent alternative "futures" of present action as to enable a choice between them to be made and blocked activity to continue. The basis of physical relativity is thus "bio-social."

It is this claim which must be kept in the foreground of attention if Mead's theory is to be understood. I shall examine it on three levels: first, the situation in which external objects are alleged to "arise" within the act when an anticipated future functions (through the organism's capacity to resist its own responses as the object if present would resist) to resolve a blocked or problematic situation and to enable activity to proceed to its consummatory phase. Here the object simply *is* what it contributes to the ongoing act, and to speak of it as a "collapsed act," a future operating in the present and the like, has a literal meaning. The second level is the situation in which objects are perceived as external to the organism, in which a distinction is made between what such objects appear to be and what (in terms of contact values) they "really" are. This is the situation to which, as Mead holds, "the scientist" always returns and in which his statements get their confirmation or confutation. The third level is the situation described by relativity physics (at least in Whitehead's version of it) in which alternative reference systems or "perspectives" are acknowledged and the laws of physics employed for the transformation of the results obtained in one such system into those obtainable in any other. Mead's theory consists in considerable part in an attempt to show that the distinctive traits of the object in (2) and (3) follow from its function in (1) and that the reference involved in statements of these latter types is identical with that of type (1).

The characteristic traits of the first type of situation, in so far as they are relevant to the subsequent derivation, are the following: Reflection, and with it "the object," arise when on-going activity is blocked, and a choice between alternative possible actions is required. The mechanism for the accomplishment of this choice is the representation as present of consequences which are actually future relative to the situation of the organism. This representation can be made only in so far as the organism now plays the part of the future object by acting as that object would act if present. It is able to do this because it has in its repertory a response which is the same in kind as that of the future object. It can resist its own responses as the thing if present for manipulation would resist. This resistance, referable either to the organism's present or the object's future, *is* the inner reality of the object as a physical thing. It provides the basis for the contrast between perspective characters which are "there" for the organism at a distance and control its approach to the object, and the contact values which define the object's reality "where it is." From this the scientific distinction between primary and secondary qualities follows. This response brings the future into the present, thus providing an object that is "spatially but not spatio-temporally distant from the organism" and defines a timeless space over against the "passage" of the organism's own activity. And it provides the material for that organization of possible futures between which a choice is to be made which has its more developed expression in the space-time of relativity. And since the separation of such contact values from both the distance characters of the object and the final consummatory experience for which the organism is headed is obviously provisional and instrumental, this account removes all appearance of independent "reality" for the objects in question or of external reference for statements about them. Such is the theory.

This theory, even on the bio-social level, requires an empirical confirmation it has not so far offered. That the resolution of a problematic situation involves an anticipatory response in which the organism may be said to stimulate itself as the object if present would stimulate it, and that this anticipatory response is an essential condition for our perception of objects (as distinct from a mere response to stimuli) is a plausible claim. But Mead's theory involves more than this. It claims that this anticipatory response takes the form of an enactment by the organism of the behavior which the object if present would manifest. That is why it seems so clear to Mead that "resistance" must be the "inner content" of the object. "I am prepared to seize the object, and then in the rôle of the thing I resist this grasp, pushing, we will say, the pro-

tuberances of the thing into the hand and arousing more effort in the hand by the leverage which the extended portion of the object will exercise, and through these responses of the thing I reach not only the final attitude of prepared manipulation but also a physical object with an inside and an inherent nature" (p. 110). Thus "one pushes from the inside of the thing against the effort one is preparing to exert against it" (p. 195) and this of course while the thing is still at a distance and only pushing through its behavioral deputy.

How is this theory to be understood? It may be that such histrionic pushing is in fact an essential part of the organism's bodily adjustment to the objects to which it is responding. The question is one for a psychologist or physiologist to settle if he can, and in so far as Mead's hypothesis is a contribution to these sciences, its critical assessment must be left to qualified practitioners. To say that in this sense a content of effort "constitutes" the object is to say that it is its behavioral deputy. If this should prove to be true it would be a useful contribution to our knowledge of organic behavior. But it would be wholly insufficient as an account of what we mean by a perceptual or physical object when we are not merely mimicking its behavior in an anticipatory bodily adjustment, but are making judgments that claim to be true about it and in many cases can be verifiably proved to be so. That we *then* represent it as an "inner content of effort," identify its present with its anticipated resistant future, or refer to it merely for the sake of completing a blocked activity does not in the least follow, and is not empirically true. Yet it must be assumed if "the act" to which objects are relative is to be identified with the bio-social drama so far described. The peculiarity of Mead's description is that it must be all of these things at once and yet can be none specifically, since its precise specification in any one context would exclude its use, in the same sense, in a different context, while such use is the basis of its philosophical pretensions.

This at once becomes apparent when we turn explicitly to the analysis of perceptual judgments. A chair is a perceptual object, and perceptually verifiable statements can be made about it. But the object of which these verifiably true statements are made is not a collapsed act, an inner content of effort, or an anticipated future enacted in present behavior. It is a material object. I can sit down in a chair, but I can not sit down in a collapsed act. The inside of a chair is what one finds when it is cut open and this (barring surprises) is solid wood. This chair did not arise in the process in which I organize blocked responses; it was manufactured by a familiar physical process long before I ever saw it. And its

use as a means to the consummatory phase of the act depends on its physical relations to other objects, my body among them, relations in which an anticipated future contact experience functioning in a present physiological drama could not stand.

It is true, of course, that all these statements have a contextual meaning which is relative to the perceptually guided activities in which they function. But this context is that in which material objects are seen and handled and described, and the "object" that is here referred to is that of which such statements as "it is solid," "it is the book I was reading yesterday," and the like, are true in their ordinary sense. To say of *this* object that it "arises" within the act, that its "reality" consists in contact values alone, or that I identify its present reality with what it will (or would) be if my present response to it were completed is simply not to describe the object here referred to, but to reduce it to the assumed psychological and physiological conditions of its perception. Such reductions have not been uncommon in the history of epistemology, but they have proved on the whole more productive of confusion than of accurate analysis and description.

Such is the case in the present instance. Mead's theory will work only if "the object" on both the perceptual and scientific level can be literally and adequately described in terms of the alleged process of "bio-social" behavior which constitutes "the act." Hence, as has been seen, the insistence on "resistance" as the "inner" reality of the object and hence the contrast between temporal characters which change their value as the organism approaches the object and an ultimate "spatial" content whose temporal distance from the organism is cancelled since it is now as responded to what a later contact experience would present. If it could be shown that the distinction between primary and secondary qualities is simply an extension of the principle that "the ultimate reality of the distance experience is to be found in that of contact experience" (p. 16), and if the "timeless" space in which motion and rest have a physical meaning could be equated with that of the "collapsed act" in which a future response is brought into present adjustment and functions as constant while distance characters change, this reduction would be measurably justified. It is in the interest of this reduction that Mead's analysis is made. In terms of it he is led to say that "the 'what a perceptual object is,' is found in contact experience alone" (p. 13) and to speak of a type of ultimate contact experience "in which all the other qualities of the object are lost" (p. 297). But this surely is incorrect. The "reality" of a perceptual object is what in perception it is found to be, and in perceptual judgments color belongs to its

"reality" quite as much as shape or weight. It is, of course, true that contact experience has a primary rôle in determining what perceptual objects *are,* as distinct from what they merely appear to be, but this is due to its superior constancy and reliability for ordinary purposes, not to the representation of an inner content defined in terms of contact experience alone. The ground for denying secondary qualities to the objects of physical analysis is found not in the primacy of an ultimate contact experience as defining the "reality" of an object, but in the success of mechanical physics, the development of the modern physiological theory of perception, and the discovery of the finite velocity of light. The qualitative physics of Aristotle did not find the "reality" of a physical thing in its primary qualities alone, nor was it any consideration arising out of such attribution that led to the overthrow of qualitative theories in chemistry. The properties attributed to physical objects are not those which enable the organism to enact their future in its own anticipatory behavior, but those that explain observed physical events. So long as a qualitative physics was found satisfactory for purposes of explanation and prediction, physical reality was described in qualitative terms. And when recent physics found it convenient to treat such "ultimate" contact values as themselves variable for physical measurement, the "reality" of physical objects was not thereby called in question. This matter has been fully discussed by Meyerson [4] and does not need elaboration here. Enough has perhaps been said to indicate that the claim that in physical theory the "reality" of the physical object need be that of an anticipated contact value alone is unwarranted. That as competent an historian of science as Mead should have overlooked this fact is explicable only in terms of his philosophical preconceptions.

Nor does it appear to be true that in either perceptual judgment or scientific description an object's anticipated future is identified with its present reality. If I observe a distant object to be changing I do not take it now to be what it will be when I reach it and thus bring its future into its present. Its present is what it is perceived to be now, and its future is estimated in terms of this present, not vice versa. It may be that I should not thus observe objects unless I were now acting out their futures in the process of my present response to them. But what I observe is not this process (if it occurs) but the object as, by such means, it is now perceived. It is also true that a knowledge of the finite velocity of light may lead me to say that objects now observed are not "now" what or where they are perceived to be, and thus to distinguish physical from perceptual simultaneity. But it ought not

[4] *La déduction relativiste,* Paris, 1925, *passim.*

to lead me *first* to give the presently perceived object the date of the future response my body is now enacting, thus identifying the future of the response with the present of the object, and *second* to identify this temporal oddity with the relativity of physical simultaneity as determined by physical clocks, time signals, and the like, to motion. Yet it is only when both these steps are taken that the presence of the future in the "collapsed act" becomes the basis for a timeless space in which the future of the object is simultaneous with a present response to it (thus eliminating temporal distance) and such timeless spaces are equated with the alternative time-systems which physical relativity presupposes. In this fashion objects of different types can indeed be brought "within the act," but it is not clear that their status is a really satisfactory one.

It is necessary, finally, to consider the situation described in relativity physics. For it is here that Mead finds clearly established that reduction of the apparently external object to its status "within the act" which is the burden of his own philosophy. The implications of the theory (which he derives chiefly from Whitehead's account of it) are mainly two. First, discovery of the variability of contact values as measured for objects in relative motion is held to reveal the essential "perspectivity" even of those characters which were used to define the inner "reality" of the object. So long as these values were thought to be absolute, a divorce of the physical reality from its place within the act seemed plausible. But "with the analysis of relativity the object that is there returns to its normal position in the situation determined by the individual and his environment" (p. 254). Such perspective characters are objectively real, for they "arise" in the delayed response of an organism which, on Mead's view, defines the timeless space in which the distinction between rest and motion has its meaning, but they are "there" only for such organisms and can not be regarded as transcending such empirical situations. And, in the second place, the space-time organization of such perspectives does not imply an ulterior reality which *is* space-time, but finds its verifiable meaning in the ability of an observer in one time-system to "take the rôle of the other" and interpret his results, by means of physical transformation formulae, in terms that will be valid for any alternative perspective. Hence, as the Introduction tells us, "the world which science presents is disclosed as the inter-subjective world common to various perspectives and the condition for the completion of various acts" (p. lxxiii). It will be seen that space-time, thus interpreted, corresponds to that present organization of possible futures for the sake of conduct which is the meaning of the object "within the act." For alternative definitions of

simultaneity there will be alternative futures (and pasts) and these will be really in nature, but only in the situations that involve organic behavior (p. 611). The "sociality" of the organization of such perspectives exhibits their place in bio-social activity and removes any vestige of suggestion of a reality that is "there" behind perspective situations themselves (pp. 251 ff.).

This fits together neatly with Mead's preconceptions, but it does not at all follow from the theory of relativity in its rôle in physical science. If the "reality" of the physical object is identified with its contact (measured) value, then the "perspectivity" of such characters robs the object of any independent status. And if the space-time structure of the physical world depends on the selective interest of the organism bent on securing a presently delayed consummatory satisfaction, then physical theory has indeed been brought "within the act."

But neither of these assumptions is warranted by the theory itself. Presumably, if philosophers are to interpret a physical theory they should know what its statements are about, and this is to be discovered by an examination of the context in which it has an independently ascertainable meaning in use. That context, in the present instance, is a subtle and intricate inquiry into the structure of the physical world on a level somewhat remote from that of ordinary bio-social adjustment. The properties attributed to objects on this level are not those which the organism can enact in its own person, nor those which are found reliable in ordinary perception. They are those which explain the sequence of observable events and direct further inquiry to a fruitful and verifiably accurate result. That measured space and time will vary with the reference system selected is a consequence not of the manner in which an organism selects its future but of the physical properties of the objects in question. It can hardly be this "choice of futures" with which an organism is confronted "within the act," unless, indeed, the activity be that of investigation in theoretical physics and its consummatory goal, an adequate knowledge of the physical world, and for this activity the "futures" as alternatives make no difference to the result achieved, since the laws of nature will be the same whichever is chosen.

Nor is the "sociality" of the result understandable in terms of any other "bio-social" interest than that in discovering invariant laws of nature. If physicists had been concerned primarily in "taking the rôle of the other" they need hardly, for purposes of sociality, have gone so far as to see themselves through the eyes of an imaginary observer leaving the earth with a velocity approaching that of light. That, perhaps, is carrying sociality a

little far. The introduction of such an observer becomes intelligible when we see its relevence to a particular development in physics, but apart from this, and the light it sheds on the nature of measured space and time, its value as an extended instance of sociality is not great.

The point is, of course, that the "reality" of the physical object as represented and the "sociality" of the knowledge we have of it depend on what we have good reason to believe that the physical world is like, and are to be accounted for in terms of the inquiry which provides such information. And the considerations that explain both the form the laws of nature have taken in Einstein's theory and the specific properties attributed to physical objects in its terms, are so remote from "the act" and its bio-social objectives that to describe them in terms of it is not to reduce "abstract" theory to empirical reality but to translate its results into the incongruous terminology of social psychology.

Of the philosophical relevance of the social consequences and perceptual basis of even the most abstract physical theory there can be no serious question. But this perceptual basis is essential just in so far as it does verify the theory, that is, gives reason for believing it to be in substantial accord with the actual structure of the physical world, though doubtless capable of endless revision and refinement. And the social consequences that are of primary importance are those that follow from the use to which reliable knowledge of the physical world can be put, in so far as it is knowledge of physical objects and events and thus not merely an organization of bio-social perspectives for the sake of an anticipated satisfaction. If this is made explicit, the "sociality" of scientific inquiry, and its service to social values, can be made intelligible without compromising its primary reference to the discovery of the nature of the physical world. But this would not be sufficient for Mead's theory; it would not bring the objects referred to within the act as previously described. We must, once more, substitute for the specific activity of inquiry a more primitive adjustment in which no such reference is discernible. And thus is a philosophical reduction purchased at the price of contextual confusion.

IV

The conclusions which this analysis has sought to justify are the following. The fundamental difficulty in *The Philosophy of the Act* arises from the attempt to specify the philosophical meaning of statements about perceptual and physical objects by referring them to a context which is incongruous with their actual meaning in use. The choice of this context is determined not by an

independent survey of the situations described, but by a desire to avoid certain theories about "reality" and to establish another. It can be controversially defended so long as all parties assume that some philosophically ultimate context must be discovered and that if it is not "the act" it will be a trans-empirical and non-actual reality in which intelligent adaptive behavior will have no philosophical standing. This assumption, however, is quite unwarranted and is in fact incompatible with the contextual theory of meaning whose importance Mead and Dewey have taught us. To abandon it, and to turn attention specifically to the inquiries in which ideas that require philosophical analysis have their meaning, is but to continue that enterprise of making our ideas clear to which pragmatism, in its early days, was committed. It is because that enterprise seems to me a uniquely valuable one that I have here attempted to distinguish it as clearly as possible from the questionable philosophy with which, in this volume, it remains entangled.

ARTHUR E. MURPHY.

BROWN UNIVERSITY.

COMMENTS AND CRITICISMS

In "Elements of Unintelligibility in Whitehead's Metaphysics" [1] Dr. Wilbur M. Urban renders public service in illustrating obstacles we must overcome in profiting by Whitehead's leadership.

(1) "From hundreds of a similar nature" Urban selects (p. 618) the great passage (*Process and Reality*, p. 46), in which Whitehead defines the primordial nature of God, and exclaims, "Surely there is no spark of meaning that springs directly from this conglomeration of words." Here the obstacle to understanding Whitehead consists in expecting meaning to "spring directly" from a passage which patently rests upon prior definitions. Urban yields to this obstacle quite often; yet the way to surmount it is encouragingly clear.

(2) "In Whitehead's system there is no thing, and nothing has or does anything," says Urban (p. 625). Yet Whitehead establishes the status of things in nature in scores of passages. For example: "The perceptual object is a factor of nature directly posited in sense awareness." Examples given are a blue coat, chairs, tables, and trees. "Scientific objects are expressible without reference to . . . a percipient event." Examples given are electrons, atoms, and molecules. "The things recognized are what I call objects." [2] Again the remedy is clear.

[1] This JOURNAL, Vol. XXXV (1938), pp. 617–637.

[2] *Concept of Nature*, pp. 155–156, and p. 189.

(3) Says Urban of Whitehead's system (p. 623): "The tacit assumption running throughout is that it [reality] is reality as determined by science, more especially physics." Yet Whitehead says again and again, in each of his metaphysical treatises, that science, especially physics, abstracts its data from their *essential* relation to "a percipient event."[3] As emphatically as Bergson, Whitehead contrasts philosophic intuitions of the concretely real with this method of science. The obstacle here is, I think, not mere forgetting, but readiness to assign to one's opponent a discredited major premise without taking the trouble to demonstrate that that assumption is implied in our opponent's conclusions.

(4) Urban finds close to "unintelligible nonsense!" the passage, "the feeler is the unity emergent from its own feelings" (p. 623). First, I would note that to say a proposition is unintelligible is incompatible with saying it is nonsense; for how could we know it is nonsense? A proposition is unintelligible to us when we fail in giving it experiential reference; it is nonsense to us when we find incompatibilities in such reference. To overlook this distinction is a grave obstacle to philosophic discourse. More specifically Urban's obstacle in this case has been well stated by Whitehead himself: "Any endeavor to go behind it [the Hume-Newton situation] is, in philosophic discussion, almost angrily rejected as unintelligible."[4] To overcome this obstacle the student has but to familiarize himself with the progress made in the last thirty-five years in recognizing that activity is prior to "thingness." Aristotle taught this in terms of *energeia* and individuation. But Dewey in *Experience and Nature* (pp. 143, 245, 267, and especially p. 395), gives the doctrine a modern dress.

(5) However, the two most ubiquitous obstacles to understanding Whitehead have yet to be noted. In *Process and Reality,* from the first to the last page, and in *Adventures of Ideas,* Chapters IX and XV, Whitehead insists that philosophic observation must take account of a scheme of factors, each irreducible, each ineliminable from the concrete fact. Two of these factors—"aim at value" (Aristotle's *telos*) and "necessary connections" (Aristotle's *eidos*) —Urban discovers, and forthwith accuses Whitehead in the name of "traditional philosophy" of serving two masters! One explanation "extrudes" the other! (pp. 628, 629). The remedy, of course, is to refresh one's memory of "traditional philosophy," including Aristotle's doctrine of causes.

(6) The second ubiquitous obstacle to Urban's understanding

[3] Compare *Concept of Nature,* p. 158, and *Adventures of Ideas,* Chapters IX and XV, which contrast scientific with philosophic method.

[4] *Nature and Life,* 1934, p. 10.

of Whitehead is the habit of overlooking the reservations with which Whitehead advances a proposition. Whitehead says the subject-predicate relation is a high abstraction; Urban supposes that Whitehead "extrudes" it from metaphysical discussion. Whitehead believes language changes with the progress of thought; Urban supposes Whitehead believes we can think without words, and that not merely new linguistic devices but a new language must be invented! Whitehead says "that Symbolic Logic . . . *with the use of real variables,* will become the foundation of esthetics. Urban (p. 629, note) overlooks the purport of the qualifying words I have italicized. This fallacy of accident is spontaneously avoided when we realize how pleasant it is carefully to observe and take account of what others say.

Others, I know, have encountered some at least of these obstacles to understanding Whitehead, but have hesitated to make public confession of their difficulties. Therefore, Dr. Urban's paper may encourage many of us no longer to shrink from a task the successful prosecution of which is desirable to students of philosophy who are not content with the rôle of "our contemporary ancestors."

PERCY HUGHES.

LEHIGH UNIVERSITY.

In a very interesting discussion of the "cognitive significance of art," in this JOURNAL (Volume XXXV, 1938, pp. 656–661), Mr. W. T. Stace asserts the identity between "scientific truth" and "artistic truth," with which Mr. T. M. Greene disagrees. To these two dissenting voices I wish to add a third. I believe that from a certain premise, which Mr. Stace and Mr. Greene share in common, the identification of scientific and artistic truths follows; but since I do not accept this conclusion I shall argue against its premise.

The objectionable premise is the opinion that truth always "consists in the correct ascription of a predicate or relation to a subject," where the subject designates reality itself while the predicate (or relation) is a human representation of reality either in words or in art. This is, no doubt, an adequate account of the truth of judgments of perception and, with important modifications and qualifications, it can be extended to the truth of propositions in scientific discourse. But so far as art is concerned we must draw the relevant distinction between *perceptual judgment* and *perception:* by means of a judgment a presentation is analyzed or *described,* perception *shows* it; judgment is *discursive,* perception is *direct cognition.* Animals perceive things, but it is doubtful whether they pass judgments, if, as some writers hold, to judge one must use concepts and, perhaps, words. A judgment is true if it

corresponds to or agrees with fact. "This is a white page" is a true judgment of perception, because, as the reader can verify for himself, the page he is reading now is, in fact, white. "The earth is round" is true if it describes the actual shape of the earth. If this were the only kind of truth, Mr. Stace would be right: for so far as I can see there is no reason why any clear-cut fact should not be describable in words of a sufficiently resourceful and subtle language. If a fact in its uniqueness and individuality remains external to its representations, the latter can give only a *generic outline* and this is within the power of words. Of course, Mr. Greene is right when he points out that in art "various expressive media differ radically in expressive power." But however radical their difference, it must be *irrelevant* to the function of giving truth, if all these media are equally outside the realm of facts to be expressed.

To me it is clear that facts about actuality do not give the whole story of reality. There are in this world potentialities, never realized, but open to imaginative insights; also there are emotions which would be killed by words but which live embodied in the artist's creation. When these things become known through art, they are not left outside art, they are in the works of art. "Hamlet" is true; yet not because it is a correct description of historical events, not by correspondence, but by *exhibition* of a human type with a degree of perfection which the subsequent course of actual history can only approach now and then with distortions and irrelevancy of detail. Let us not forget the aperçu at the bottom of Oscar Wilde's paradox that nature learns to imitate art. The truth of art is, therefore, comparable rather to a "show" of ordinary perception than to the truth of perceptual judgments. If we do not call ordinary perception true, this is because, as a fact, it *is* the truth of judgments or propositions which describe it. And ordinary perception *can* be described in a medium which is outside it because it is common and vague and, probably, generic. On the contrary, presentations of art are *intense* and *specific,* and since this is their distinguishing characteristic, they can not be described in generic words of science without a loss of individuality, and, consequently, without utter destruction. Of course, some works of art, poems, are expressed in words; but then they can be translated neither into the words of another language, nor into music, nor into any different expressive medium of art. A true work of art is the only thing which can reveal its own truth.

A. USHENKO.

PRINCETON UNIVERSITY.

BOOK REVIEWS

The Place of Value in a World of Facts. WOLFGANG KÖHLER. New York: Liveright Publishing Corporation. 1938. ix + 418 pp. $3.75.

Of the many books which might have borne the excellent title chosen for his William James lectures at Harvard in 1934, Professor Köhler has written one which hardly mentions values, but which moves swiftly and panoramically over complex masses of facts. "The purpose of the book," he asserts, "is philosophical," although not in the sense of reaching "general solutions of general problems." The approach is through the analysis, and, where necessary, the reconstruction of scientific concepts in order that man may be enabled to understand his place in nature. It is only fair to the author to point out that a detailed judgment of his work would call for a versatility equal to his, amounting to a familiarity with the latest developments in the fields of physics, biology, physiology, neurology, and psychology.

Like many another scientist, he has been bothered both by the positivistic tendency to read man out of nature, and by the expedients to which philosophers have resorted to escape from its consequences. The latter

> have tried to escape where no escape is feasible. Vitalists have attempted to separate the organic realm from inanimate nature, and to defend the former against the principles which govern the latter. Other philosophers soon began to realize how useless any resistance must be in this outlying territory. They retreated into the realm of the mind and of human culture. But Naturalism penetrated into this stronghold, too. Thus Husserl sacrificed the whole world of facts, including those of actual mental life, and took refuge in a world of pure timeless essences. It has all been in vain. . . . I do not see a single position to which we can now retreat. [P. 409.]

The alternative is a fresh attack, with new weapons.

> As I see it, we should quietly accept [the intimate relation between mental life and biological facts] as a fact, and then examine the alleged danger. . . . These facts of nature have to be interpreted in a way that makes them compatible with our experience of psychological facts. [P. 410.]

The key to values, according to the author, lies in the notion of "requiredness" or "that which ought to be." The prevailing view is that "facts are or happen indifferently. There is no requiredness about them. Consequently there is no place for requiredness in a world of facts" (p. 72). Dr. Köhler undertakes to show by an extended phenomenological analysis that "certain facts do not

only happen or exist, but, issuing as vectors in parts of contexts, extend toward others with a quality of acceptance or rejection" (p. 100). "Within certain factual contexts the requiredness or wrongness of some facts is no less real than is the existence of these facts" (p. 102). How can we bridge the apparent gulf between the so-called "physical world" and the realms of value? The answer is by the principle of isomorphism by which all sensory qualities are assumed to have cortical correlates, requiredness along with the rest (pp. 194–195). In an argument much too involved to summarize, the author holds that macroscopic physical states rather than microscopic events give the clue to the structural isomorphism of requiredness and its cortical correlate (p. 224). This introduction of fields and forces brings him into admittedly dangerous ground from the point of view of physics, which has learned to distrust the allegedly anthropomorphic notion of "force" of any kind. Yet the contemporary horror of falling into anthropomorphism should not be permitted to blind us to the fact that man, as both the child of inorganic nature *and* the builder of the science of physics, is "the most challenging subject-matter of that discipline" (p. 393).

Even supposing requiredness to have been discovered among the facts of nature, it is obvious that many examples of it conflict with one another. "Mere requiredness as such occurs within the mental processes of insane and of feeble-minded people." But, although his analysis sheds little direct light on the conflicts among values, Dr. Köhler believes that he has "now overcome some difficulties of principle" that were blocking important advances (p. 411).

So necessarily sketchy an outline can give hardly more than a hint of the keen, wide-ranging, and original thought which has gone into these lectures, and which should supply subjects for experiments among scientists as well as for debate among philosophers. To read them calls for the closest attention to frequent changes of method and of point of view, and also for patience with a hybrid style. The distinguished Gestalt psychologist is well aware that he has "ended his investigation at a stage in which there are few answers and countless questions"; but he should be credited with a rare willingness to risk new and adventurous hypotheses in difficult fields, where few scientists of his competence have dared even to risk philosophizing in public.

H. A. L.

Interpretations and Misinterpretations of Modern Physics. PHILIPP FRANK. (Exposés de Philosophie Scientifique, II.) (Actualités Scientifiques et Industrielles, No. 587.) Paris: Hermann & Cie. 1938. 59 pp. 18 fr.

In this small monograph Professor Frank tracks down very effectively the source of the misreadings and distortions which philosophers and physicists have given to the conclusions of contemporary physics. He shows how essential it is to construe the propositions of physics in terms of the grammar or syntax of the theory of which they are part, and by employing this technique easily exhibits as irrelevant to physics the familiar "interpretations" by such men as Jeans, Eddington, *et al.* Among other matters, Professor Frank explains Bohr's Principle of Complementarity, the rôle of the observer in classical and relativity physics, and what the "new conception of space and time" of relativity physics consists in; and it becomes evident that he does not subscribe to the suggestion "that the more advanced it is, the more science corresponds to what man had always known without benefit of science."

E. N.

Die gegenwärtige Lage in der mathematischen Grundlagenforschung. Neue Fassung des Widerspruchsfreiheitsbeweises für die reine Zahlentheorie. GERHARD GENTZEN. (Forschungen zur Logik und zur Grundlegung der exakten Wissenschaften, Neue Folge, Heft 4.) Leipzig: S. Hirzel. 1938. 44 pp. 2.20 M.

The first of the two essays in this brochure is a very informative and suggestive account of the present state of researches in the foundations of mathematics. It can be recommended especially to those who have not the time or the training to read the detailed technical researches in this subject. Dr. Gentzen explains the significance of the work of Gödel and Skolem, briefly indicates what the possibilities are for proving the consistency of analysis, and discusses the rôle of constructivist and non-constructivist tendencies in mathematics. The second essay is specialized and technical, and offers a new but simplified version of Dr. Gentzen's important consistency-proof of general number theory. It includes some provoking comments on the constructive character of the principle of transfinite induction employed by him in that proof.

E. N.

Le langage des sciences. PIUS SERVIEN. (Esthétique, I.) (Actualités Scientifiques et Industrielles, No. 592.) Paris: Hermann & Cie. 1938. 88 pp. 20 fr.

M. Servien argues that our "total language" is not homogeneous, but breaks up into two parts, the Language of Science and the Lyrical Language. The former is the set of all expressions which have one fixed meaning and which are such that each of them has many equivalent expressions. This is not true for the expressions of the Lyrical Language, which contains among other things the language of metaphysics: they are not meaningless, in fact they have too much meaning and are incapable of being handled by the methods of logic and algebra just for that reason; and the failure of Descartes, Leibniz, and other philosophers to construct a scientific (mathematical) metaphysics must be taken as a sign not of their lack of skill but of the profound difference between these two languages. Consequently, metaphysics, esthetics, psychology, and sociology, which require the use of the Lyrical Language, must be cultivated by distinctive methods—into which the author does not enter in the present monograph. M. Servien's general thesis is based upon a clear and sharp distinction between the two "polar" languages he discusses; but his present essay does not place the basis of that distinction beyond reasonable doubt.

E. N.

La méthode de réflexion chez Maine de Biran. P. G. FESSARD. (Cahiers de la Nouvelle Journée, 39.) Paris: Bloud et Gay. 1938. 184 pp. 24 fr.

This volume is a reconstruction of Maine de Biran's thoughts, systematizing them to bring out their fundamental consistency and their fidelity to Catholicism. The thesis does not seem to the writer of this notice to have been proved, largely because he is not convinced that Biran did not start out as a good *idéologue.* It should be added that the study was composed some fifteen years ago when the texts of Maine de Biran were not in their present shape.

G. B.

OTHER NEW BOOKS AND JOURNALS

De Iriarte, Mauricio: Dr. Juan Huarte de San Juan und sein "Examen de Ingenios." Ein Beitrag zur Geschichte der differentiellen Psychologie. (Spanische Forschungen der Görresgesellschaft, Reihe II, Band 4.) Münster in Westfalen: Aschendorffsche Verlagsbuchhandlung. 1938. 208 pp. 7.35 M.

del Valle, Francisco Gonzalez: Cronología Herediana (1803–1839). La Habana: Direccion de Cultura. 1938. 328 pp.

Revue de Métaphysique et de Morale. 46e Année, No. 1. Possibilité et réalité, esthétique et éthique: *S. Kierkegaard.* Le problème du solipsisme: un essai de solution: *A. Stern.* A propos de mes "Nouvelles Vues Logiques": *F. Orestano.* Le rôle de la représentation géométrique des grandeurs: *G. Loria.* Pourquoi une religion nationale en Allemagne? *E. Vermeil.* Irène et Arété, *Dialogue des Morts: Speusippe.* L'œuvre de Henri Delacroix: *M. Pradines.* Le problème des nationalités: *E. Halévy.* Les traités de 1919, l'idée de justice internationale et la France: *R. Berthelot.*

Blatter für Deutsche Philosophie. Band 12, Heft 3. Sprache und Wirklichkeit: *Hermann Ummann.* Natürliche Sprachen und Kunstsprachen. Vortrag in der Vereinigung der Freunde des humanistischen Gymnasiums in Münster i. W. am 14. Januar 1938: *Heinrich Scholz.* Die Verbindlichkeitder Sprache: *Hans Lipps.*

La Critica. Anno XXXVI, Fasc. VI. Studi su poesie antiche e moderne (cont.) XIII. Virgilio—Enea di fronte a Didone: *Benedetto Croce.* Aggiunte alla "Letteratura della nuova Italia" (cont.) XXXVI. Scrittrici: I. Annie Vivanti. II. Grazia Deledda: *Benedetto Croce.* Cattolicismo e civiltà moderna nel secolo XIX (cont.): III. Il cardinale Consalvi al Congresso di Vienna. (I.) La situazione ecclesiastica e diplomatica: *Adolfo Omodeo.*

We print below a list of selected articles from the following publications:

Scholastik. XIII. Jahrgang, Heft 1. Immanenz und Transzendenz: Zum geschichtlichen Werden heutiger Problematik: *Joh. B. Lotz.* Zur Phänomenologie der Philosophie der Thomisten des 17./18. Jahrhunderts: *Bernh. Jansen.* (Heft 2.) Immanenz und Transzendenz heute. Zur inneren Struktur der Problematik unserer Tage: *Joh. B. Lotz.* Ursprung und Grundzüge der Existenzialphilosophie: *August Brunner.* (Heft 3.) Erkenntniskritik und Metaphysik: *Jos. de Vries.* (Heft 4.) Das Wesen der Wissenschaft und seine Besonderung in Geistes- und Naturwissenschaft: *August Brunner.* Die unmittlebare Gotteserkenntnis als Grundlage des Erkennens und als Ziel des übernatürlichen Strebens bei Augustin: *Endre von Ivánka.*

Rivista di Filosofia Neo-Scolastica. Anno XXX, Fasc. IV. Rapporti tra trascendentale e categorie: *Grazioso Ceriani.* Osservazione sulla critica empirica del concetto di sostanza: *Gustavo Bontadini.* Lo sviluppo delle categorie nella Logica di Hegel: *Luigi Pelloux.* La natura delle categorie secondo F. Brentano: *S. Vanni-*

Rovighi. (Fasc. V–VI.) Il platonismo di San Gregorio Nisseno nel dialogo "Intorno all'anima e alla risurrezione": *Michele Pellegrino.* Il principio di causalità nella gnoseologia di S. Tomaso: *Franco Amerio.*

GREGORIANUM. Anno XIX, Fasc. IV. La filosofía "geométrica" en Descartes, Spinoza y Leibniz: *J. Iriarte-Ag.* De philosophia scholastica cognitionis geometricae: *P. Hoenen.*

REVUE D'HISTOIRE ET DE PHILOSOPHIE RELIGIEUSES. Six-huitième Année, No. 3. La mystique de L'imitation du Christ et de l'unité chez Ignace d'Antioche: *Th. Preiss.* (No. 4.) Le problème de l'Eglise dans le christianisme prititif: *Maurice Goguel.* Le VI^e^ siècle, moment décisif dans l'histoire du iudaïsme et dans l'évolution religieuse de l'Orient: *Stanley Cook.*

RECHERCHES DE THÉOLOGIE ANCIENNE ET MÉDIÉVALE. Vol. X, No. 4. La notion philosophique du miracle chez saint Augustin. Dans le "De Trinitate" et le "De Genesi ad litteram": *D. P. De Vooght.*

ZEITSCHRIFT FÜR THEOLOGIE UND KIRCHE. 19. Jahrgang, Heft 4. Die Haupttypen der Verschnungslehre: *K. Heim.* Eros und Agape: *Kurt Leefe.*

RELIGIO. Vol. XIV, No. 4. Mentalità primitiva e Cristianesimo: *Ernesto De Martino.* (No. 6.) Il valore simbolico del rito pasquale ebraico: *Italo Zolli.* Ideali sociali e religiosi nel cristianesimo primitivo: *Ernesto Buonaiuti.* Le orecchie dell'aquila: *Adriano Tilgher.* (Vol. XV, No. 1.) La preghiera dell-uomo: *Alfredo Poggi.* Il dogma centrale del cristianesimo storico: *Ernesto Buonaiuti.*

NOTES AND NEWS

The Board of Officers of the American Philosophical Association has elected Professor Cornelius Krusé, Wesleyan University, Middletown, Connecticut, secretary of the Board for the three-year period 1939–1941.

The Institut International de Collaboration Philosophique plans to hold its annual discussion meetings at University College, London, about the middle of September. The general subject of these meetings has been announced as "Invention and Method." American philosophers are cordially invited to attend. Information may be obtained by writing to Professor Raymond Bayer, 26 Avenue Théophile Gautier, Paris.